

Kenneth Hurst Williams

Lawrence Berkeley National Laboratory
Climate and Ecosystem Sciences Division
1 Cyclotron Rd., Berkeley, CA 94720
ph: 510.701.1089; khwilliams@lbl.gov

EDUCATION

University of California, Berkeley	Geology	BA, 1993
University of California, Berkeley	Geophysics	MS, 2002
University of California, Berkeley	Environmental Science, Policy & Management	PhD, 2008

PROFESSIONAL EXPERIENCE

- 2017-present Member, Board of Trustees, Rocky Mountain Biological Laboratory, Gothic, CO
2013-present Environmental Remediation and Water Resources Program Lead, Lawrence Berkeley National Laboratory, CA.
2013-2014 Science Advisor, GreenPyro, Inc., Palo Alto, CA.
2012-present Geological Staff Scientist, Earth Sciences Division, Lawrence Berkeley National Laboratory, CA.
2012-2015 Chief Materials Scientist, Biochar Solutions, Inc., Carbondale, CO.
2009-2012 Geological Research Scientist, Earth Sciences Division, Lawrence Berkeley National Laboratory, CA.
1998-2009 Senior Scientific and Engineering Associate, Earth Sciences Division, Lawrence Berkeley National Laboratory, CA.

PATENT DISCLOSURES

- 2010 IB-2316 An Organic Molecule Coated CoFION Amendment for Biostimulation of FeRB (DOE #S-110,776). Benjamin Gilbert, Jillian F. Banfield, and Kenneth H. Williams.

EDITOR POSITIONS

- Journal of Geophysical Research – Biogeosciences (Associate Editor)
Interpretation (Associate Editor)

PUBLICATIONS

111. T. N. M. Jewell, U. Karaoz, M. Bill, R. Chakraborty, E. L. Brodie, K. H. Williams, and H. R. Beller, Metatranscriptomic analysis reveals unexpectedly diverse microbial metabolism in a biogeochemical hot spot in an alluvial aquifer, *Front. Microbiol.*, doi: 10.3389/fmicb.2017.00040, **2017**
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108. B. Arora, D. Dwivedi, S. S. Hubbard, C. I. Steefel, and K. H. Williams, Identifying geochemical hot moments and their controls on a contaminated river floodplain system using wavelet and entropy approaches, *Environ. Model. Softw.*, 85, 27-41, doi: 10.1016/j.envsoft.2016.08.005, **2016**
107. B. Arora, N. F. Spycher, C. I. Steefel, S. Molins, M. Billa, M. E. Conrad, W. Donga, B. Faybishenko, T. Tokunaga, J. Wan, K. H. Williams, and S. B. Yabusaki, Influence of hydrological,

- biogeochemical and temperature transients on subsurface carbon fluxes in a flood plain environment. *Biogeochemistry*, 127, (2), 367-396, doi: 10.1007/s10533-016-0186-8, **2016**
106. J. Chen, S. S. Hubbard, K. H. Williams, and D. L. Ficklin, Estimating groundwater dynamics at a Colorado River floodplain site using historical hydrological data and climate information, *Water Resour. Res.*, 52, doi: 10.1002/2015WR017777, **2016**
105. A. C. Cismasu, K. H. Williams, and P. S. Nico, Iron and carbon dynamics during aging and reductive transformation of biogenic ferrihydrite, *Environ. Sci. Technol.*, doi: 10.1021/acs.est.5b03021, **2016**
104. R. E. Danczak, A. H. Sawyer, K. H. Williams, J. C. Stegen, C. Hobson, and M. J. Wilkins, Seasonal hyporheic dynamics control coupled microbiology and geochemistry in Colorado River sediments. *J. Geophys. Res. Biogeosci.*, 121, 2976–2987, doi: 10.1002/2016JG003527, **2016**
103. R. Danczak, S. Yabusaki, K. H. Williams, Y. Fang, C. Hobson, and M. J. Wilkins, Snowmelt induced hydrologic perturbations drive dynamic microbiological and geochemical behaviors across a shallow riparian aquifer, *Front. Earth Sci.*, doi: 10.3389/feart.2016.00057, **2016**
102. W. Dong, J. Wan, T. K. Tokunaga, B. Gilbert, and K. H. Williams, Transport and humification of dissolved organic matter within a semi-arid floodplain, *J. Environ. Sci.*, doi: 10.1016/j.jes.2016.12.011, **2016**
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- reactivity of uranium products formed during in situ bioremediation in the Old Rifle, CO aquifer, *Environ. Sci. Technol.*, 48, 12842-12850, doi: 10.1021/es502701u, **2014**
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BIOGRAPHICAL SKETCH

Dr. Kenneth H. Williams is a Staff Geological Scientist and Program Lead for Environmental Remediation and Water Resources in the Climate and Ecosystem Sciences Division of the Lawrence Berkeley National Laboratory in Berkeley, California. He received a B.A. in Geology, an M.S. in Geophysics, and a Ph.D. in Environmental Science, Policy & Management from the University of California, Berkeley. He is the author or co-author of 110+ peer-reviewed publications and currently serves as an associate editor of JGR-Biogeosciences. He is a pioneer in the field of biogeophysics, with a particular emphasis on the development of minimally invasive techniques for characterizing the subsurface activity of microbial communities and the end products of their metabolism. His current research interests include seasonal variations in redox-sensitive elements, such as C, N, S, Fe, and Mn, issues impacting the long-term mobility of contaminant metals in the subsurface, and the coupling of hydrological and biogeochemical processes that impact both. He currently serves as the Deputy Lead and Chief Field Scientist of Berkeley Lab's Watershed Function Scientific Focus Area based near Crested Butte, Colorado (USA), which addresses questions pertaining to the ability of mountains watersheds to retain and release water, nutrients, carbon, and metals in the face of climate perturbation and climate extremes. In this capacity, Dr. Williams is tasked with overseeing and integrating the field research activities of a multi-disciplinary, multi-institutional team of researchers (National Laboratory, University, Industry) that span the continuum of spatial scales from pore to catchment. Accomplishing these goals requires a deep knowledge of a broad range of topics within earth system sciences, including catchment hydrogeochemistry, ecohydrology, microbe-mineral interactions, redox cycling of biologically critical elements within sediments, streams, and groundwater, and the underlying biological pathways and proxy signatures (e.g. gene and protein expression) associated with both.

Graduate Advisor: Prof. Jillian F. Banfield [UC-Berkeley]